

The National Sustainable Design Expo featuring the U.S. Environmental Protection Agency's (EPA) P³ Award brings together students, nonprofit organizations, and government agencies that are working to create a sustainable future. The Expo is a unique opportunity to discover innovative, cutting-edge technologies, learn what nonprofit organizations and government agencies are doing to advance sustainability, and meet students studying engineering, sciences, law, economics, and architecture. The Expo takes place each spring on the National Mall in Washington, DC, and is open to the public.

Targeting Sustainability

In a world with increasing trends in water and energy use, consumption of goods and finite resources, we need more creative ways of integrating social, economic, and environmental goals. The task ahead is to design a sustainable future that mutually achieves environmental protection, prosperity, and improved quality of life through innovative science, technology, and policy.

P³ (People, Prosperity and the Planet) National Student Design Competition

In 2004, EPA launched P³, a grant program aimed at fostering future generations of scientists, engineers, and decision makers to meet the challenges of sustainability through innovative solutions. Unique in the federal government, this program awards grants to teams of undergraduate and graduate students, along with their faculty advisors, to design and develop solutions to sustainability challenges. The P³ Competition consists of two phases. In Phase I, student teams compete for grants of \$10,000 to research and develop their projects during the academic year. In Phase II, the P³ grantees come to Washington, DC, to compete for the P³ Awards at the National Sustainable Design Expo. The awards provide an opportunity for funding to further develop and implement the award-winning technologies.

Join us as we explore the future today!

This year's Expo is cosponsored by:







Agenda and Expo Location

Sunday, April 20, 2008

12:00 p.m. – 5:00 p.m. Exhibits and P³ Team Projects Open to the Public

Monday, April 21, 2008

9:00 a.m. - 9:30 a.m. Welcoming Remarks

9:30 a.m. – 5:00 p.m. Exhibits and P³ Team Projects Open to the Public

Tuesday, April 22, 2008

9:00 a.m. – 3:00 p.m. Exhibits and P³ Team Projects Open to the Public



2008 National Sustainable Design Expo Co-Sponsors



Established in 1970, EPA's mission is to protect human health and the environment. As the world continues to change, EPA also continues to evolve. EPA Administrator Stephen L. Johnson has said, "EPA is at a crossroads. Over the Agency's 35 years, public perception of environmental stewardship has evolved from "let the government take care of it" into each individual's responsibility. EPA must now set this environmental agenda and highlight the mechanism to increase the public role in stewardship."

With an eye toward the future, EPA is continuing to build its capacity to anticipate and analyze trends that have implications for sustainability. An awareness of the environmental consequences of social, economic, and technological changes is critical for making better informed strategic decisions about the Agency's work in a rapidly changing world.

EPA has dozens of programs, policy tools, and incentives that implement and encourage sustainability. The Agency is working in many ways to help individuals and organizations blend these programs, improve industrial practices, and assist states and local governments to manage their resources effectively. www.epa.gov



The mission of The Cloud Institute is to ensure the viability of sustainable communities by leveraging changes in K-12 school systems to prepare young people for the shift toward a sustainable future. We believe that K-12 education can substantially influence beliefs, attitudes, values, and behaviors related to sustainability. This is the most fertile ground for helping to shape a society committed to sustainable development.

We are the premier organization that equips school systems K-12 and their communities with the core content, competencies, and habits of mind that characterize education for a sustainable future. We do this by inspiring teachers and engaging students through meaningful content and student-centered instruction that inspires young people to think about the world, their relationships to it, and their ability to influence it in an entirely new way.

The Cloud Institute is proud to demonstrate new curriculum material developed especially for the National Sustainable Design Expo that uses classroom material, an onsite activity, and the Expo exhibits to learn the principles behind life cycle analysis and how to evaluate the sustainability of a product or process. www.sustainabilityed.org



Founded in 1974, the World Environment Center (WEC) is an independent, global nonprofit, non-advocacy organization that advances sustainable development through the business practices of member companies and in partnership with governments, multi-lateral organizations, non-governmental organizations, universities, and other stakeholders.

WEC's mission is the following:

- Promote business and societal value by advancing solutions to sustainable development-related problems;
- Foster leading-edge ideas about economic development, environmental protection, and social responsibility through roundtables and other forums that engage the leadership of a diverse number of organizations; and
- Recognize performance excellence by companies that advance sustainable development. www.wec.org

P³ Teams for 2008 alphabetically by college/university

Project Title
Exhibit Location Challenge Area
Description

Phase I Teams

The Boone Bicycle Initiative: A Community-Based Project To Promote Bicycles as an Alternative Mode of Transportation

C-25

Appalachian State University students are developing a community-based program to encourage the use of bicycles for commuting. The program will include a bike-friendly policy, signage and racks, a community awareness campaign, and a bicycle distribution and maintenance facility.

Place-Based Green Building: Integrating Local Environmental and Planning Analysis Into Green Building Guidelines

A-15 📵

Auburn University students will develop a methodology for rating buildings for green features within their local environment and social context. Additionally, they will analyze incentives and regulations for implementing various types of green features.

Reducing the Waste Stream: Bringing Environmental, Economical, Aesthetic, and Educational Composting to a Liberal Arts College

A-1 📳

Carleton College students are piloting a school composting program that will compost waste food from the dining halls, measure the economic benefits to the school, and incorporate the system into the liberal arts environment as an interdisciplinary and educational tool.

Engineering the Biosynthesis of Styrene in Yeast D-12

Carnegie Mellon University students are exploring a biological process using genetically modified yeast to synthesize styrene. This compound, found in many products, is a petroleum-based resin currently produced using enormous amounts of natural gas.

Sustainability of Chadron Creek Watershed

A-16

Chadron State College students will develop and implement a sustainability model to revitalize the Chadron Creek watershed in Nebraska that brings together several different sectors of the community to share information and decisionmaking. Chadron Creek is a significant regional resource for drinking water and industrial and recreational use that has been degraded by ash runoff from recent forest fires as well as intensive grazing.

Waste Tires on the Island of Dominica Survey and Solutions D-21 (

Clemson University students will develop alternatives for automobile tire recycling and/or disposal for the island nation of Dominica. With limited landfill space and no off-island disposal system, tires have begun piling up, which impacts the island's tourism potential, breeds mosquitoes, and poses a fire hazard.

CHALLENGE AREAS					
Agriculture	Information Technology				
Built Environment	Materials and Chemistry				
Energy	Water				

Development Plan of a Sustainable Micro-Hydro Power Plant and Distribution System for a Tribal Village Cluster in Rural India

A-5 🕘

Columbia University students, partnering with the local non-governmental organization, Gram Vikas (GV), will gather data to design a micro-hydro power plant in the Badi Trika Gouda village in India. Currently, the village relies on firewood and animal waste for light and for cooking.

A Novel Reactor Design for Efficient Production of Biodiesel From High Free-Fatty-Acid Oils

C-7 (2)

Drexel University students will design, study, and build a reactor that produces biodiesel more efficiently. The current method produces soap as a byproduct, which hinders the process. The students propose using bubbling alcohol vapors and acid catalysts to avoid this problem.

Stand-Alone "Green" Community-Center Buildings: Hydrogen Generation/Storage/ Delivery System for When Primary Energy Storage Is at Capacity B-5 (2)

Elizabethtown College students will design, construct, and monitor a "smart" hydrogen fuel storage system. The project aims to overcome the main challenge associated with stand-alone, renewably powered buildings, which is the creation of a highly efficient and long-lived energy storage system.

West African Technology, Education, and Reciprocity (WATER) for Benin C-14

Gonzaga University students seek to improve the production of drinking water filters to be used in Porto-Novo, Benin. Students will study the complexities associated with access to drinkable water and undertake a variety of projects aimed at improving the manufacturing, marketing, and distribution of the filters.

Paving the Way to a "Greener" Campus: Alternative Paving Materials for Pollution Control and Aesthetic Appeal C-1

Heidelberg College students will develop a cost-effective and sustainable design for paved parking areas. Runoff from parking lots, which includes toxins from vehicles, contributes to the pollution of nearby water sources. Their design will reduce contaminating runoff and incorporate recycled materials.

Catching the Wind: A Low-Cost Method for Wind Power Site Assessment B-25 (2)

Humboldt State University students will design software that predicts wind energy potential and will install a monitoring system at a test site to evaluate it.

P³ Teams for 2008 alphabetically by college/university

Project Title
Exhibit Location Challenge Area
Description

Sewage Off-Gas-Drive Fuel Cells To Stimulate Rural Electrification D-15 (2)

Illinois Institute of Technology undergraduate and graduate students, in concert with high school students from the Illinois Math and Science Academy, will study a power-generating system that creates electricity from decomposing organic waste. The system captures methane gas given off from the waste and uses it to power a fuel cell that generates electricity.

Design of Sustainable Water Supply and Distribution System for Pignon, Haiti D-14

Illinois Institute of Technology students will help design a local, sustainable water supply and distribution system for the 30,000 residents of Pignon, Haiti, who currently must travel to get their water.

The Cast Paper Dome: An Opportunity To Develop New Materials and Construction Techniques for a Sustainable Building D-13

Illinois Institute of Technology students will construct a compact geodesic dome from recycled paper. The group will build the dome, monitor it for several months, and then disassemble it. Once disassembled, the pieces will be tested to see how their structural integrity has changed over time and how it might be improved.

Bioindicators of Sustainable Development Strategies in Subtropical Climates

Inter American University of Puerto Rico students are studying the effect of land development in Puerto Rico on ecosystem health, a connection that is vital to show in a place where tourism is dependent on natural bounty.

Small-Scale Fuel Alcohol Production To Meet University Vehicle Fuel Needs and Promote Regional Sustainable Development B-20 (2)

Iowa State University students and **Federal University of Viçosa**, **Brazil** students will design and build inexpensive, small-scale ethanol production and distribution systems with materials provided by local farmers near the Brazilian university.

Sustainable Water Extraction and Distribution System for Agricultural Applications in the Namawanga Community, Kenya D-5

James Madison University students will partner with the nonprofit organization, Least of These International, Inc. (LOTI), to create a sustainable water pumping and irrigation system for the Namawanga Community in western Kenya, a community that does not have adequate water for crops to feed everyone.

CHALLENGE AREAS					
Agriculture	Information Technology				
Built Environment	Materials and Chemistry				
Energy	Water				

Sustainable Community Development – Slow-Sand Water Filtration A-28

John Brown University students will design and construct a slow-sand water purification system for use by small communities. The water filtering system will be affordable, durable, and be able to sustain sufficient water flow for a community.

Keene Community Partnership for a Closed Loop Biodiesel System D-24 (2)

Keene State College students are implementing a manufacturing plant/research facility through a public/private/college partnership for biodiesel production, use, and research that will both serve the community in a sustainable manner as well as support hands-on learning for college students.

Development, Design, and Consumer Testing of Marketable Residential LED Light Luminaries

A-6

Lawrence Technological University students will design and construct two aesthetically pleasing and energy efficient LED lights. Their project aims to counter current public perceptions of LEDs that their lighting and color schemes are not attractive and that they are more expensive than conventional lighting.

Innovative Biodiesel Production: A Solution to the Scientific, Technical, and Educational Challenges of Sustainability

D-2 (2)

Loyola University of Chicago students will construct a laboratory to produce biodiesel from their cafeteria's vegetable oil waste. The laboratory will act as an educational tool for students as well as the general public, and the fuel that is produced will be used to power inter-campus shuttle busses and other university vehicles.

Sustainable Water Supply for La Garrucha, Guatemala C-11

Marquette University students will design and evaluate alternative methods of obtaining access to clean drinking water for the residents of La Garrucha, Guatemala. The town of 2,000 people in the Guatemalan Highlands currently uses water from a stream contaminated with coliform bacteria.

Higher Performance Solar Crop Dryer Kit for Developing Economies A-22

Northern Illinois University students will design a prototype for a solar-powered crop dryer that would replace fossil fuel crop dryers and provide farmers around the world with a tool that could significantly reduce drying times and protect crops from the elements.

Eco-Friendly Golf Tees Filled With Corn-Based DDGS A-21

Northern Illinois University students will develop a process for incorporating a by-product of the ethanol industry into the manufacture of plastics. As the ethanol industry grows, there will be an abundance of process by-products called distiller dried grains with solubles (DDGS). The team's project will demonstrate how DDGS could be incorporated into plastics.

P³ Teams for 2008 alphabetically by college/university

Project Title
Exhibit Location Challenge Area
Description

Improving Public Awareness of Chemical Exposure Through a 3-D Online Environmental Education Simulation

B-22 🛞

Ohio University students will design a video game to increase public awareness of everyday chemical exposures. Modeled on gaming technology, the computer simulation will bring players into virtual contact with various chemicals, and in the process educate them about exposure.

The Man's Jacket Design for Disassembly: An Implementation of C2CAD Framework A-27

Oklahoma State University and **Illinois State University** students will create a man's jacket from environmentally benign chemicals and materials. Building on a 2006 P³ project, the students will design the product to be easily broken down and recycled into other products.

Sustainable Biofuel Systems for Undeveloped Regions D-7 (2)

Oregon State University students are designing a model for implementing the use of vegetable oil-based fuels in the developing world. The project will work with a community in the Pacific Islands to identify which alternative fuel works best within unique social, economic, and environmental conditions and how best to go about implementing it.

Green Engineering To Reduce the Use of Petroleum Energy Resources C-12 (2)

Pennsylvania State University students will use plant oils, animal fats, algae, and waste cooking oil in a variety of chemical engineering experiments to sustainably create biodiesel. This project, which will reduce the university's use of petroleum, is part of an ongoing effort to green the campus.

Development of a Method To Convert Green and Animal Wastes to a Useful Agricultural Product With Possible Alternative Fuel Use C-19

Pierce College students will produce a product from animal and green wastes that will be a fertilizer and/or a fuel source. Waste, as it is currently treated, is either inefficiently composted or potentially endangers our water supply. This project will test sustainable methods of turning waste into an efficient and clean resource.

An Innovative Paradigm: Green Retrofitting Residential Buildings C-20

Princeton University students will partner with the Stony Brook-Millstone Watershed Association to develop cost-effective retrofitting strategies to reduce energy consumption in homes, including raising awareness of certain preexisting retrofitting practices.

CHALLENGE AREAS					
Agriculture	Information Technology				
Built Environment	Materials and Chemistry				
Energy	Water				

Synthesis and Characterization of a Novel Solid Acid Catalyst for Improved Use of Waste Oil Feedstock for Biodiesal Production

A-2 🚺

Radford University students will create a novel carbon catalyst to help improve the efficiency of biodiesel made from waste oil. The current method of production creates soap as a by-product, which hinders production. The carbon catalyst will halt the production of soap and make the process more efficient and affordable.

Developing a Small Business in Response to a Stormwater Utility for the New Jersey Meadowlands

C-15 🚺

Rutgers University students are developing a business plan for a consulting company to a stormwater utility in New Jersey to provide best management practices (BMPs) for the facility, an implementation plan, and a business model.

Manufacture of a Photovoltaic Solar Cell Using Plant Chlorophyll D-20 (2)

St. Lawrence University students will create a chlorophyll-based photovoltaic cell to generate electricity from solar power. Using chlorophyll, it is possible to produce solar cells at room temperature as opposed to the 1900° C required for silicon-based cells, making the process affordable and environmentally benign.

Solar Lighting for Remote Rural Communities B-1 (2)

The Cooper Union and Kwame Nkrumah University of Science and Technology (KNUST) students are developing a rechargeable lantern that can be used in remote communities around the world. The project includes direct interactions and input from communities throughout Northern Ghana, an area for which the lantern is initially intended.

The Development of an Indigenous Fluoride Filter B-14

The Cooper Union and **Kwame Nkrumah University of Science and Technology (KNUST)** students will work to develop a simple filter that removes fluoride from ground water. In Ghana—where KNUST is located—and many other rural communities, the ingestion of fluoride from ground water is a significant problem for children 5 years old and younger.

Harvesting Rooftop Runoff From RDP Housing in South Africa: A Pragmatic Approach To Supplement Water Supply While Reducing Flooding, Soil Erosion, and Disease B-4

The Ohio State University students will design a collection and distribution system for water runoff from metal rooftops of South African homes built by the Reconstruction and Development Programme (RDP). The system will use the collected water for flushing toilets and watering gardens.

P³ Teams for 2008 alphabetically by college/university

Project Title
Exhibit Location Challenge Area
Description

Power Generation Using a Magnetohydrodynamic Generator With a Circulation Flow Driven by Solar-Heat-Induced Natural Convection A-23 (2)

University of Arizona students will design and test a novel means of generating electricity using solar heat. The system, called a magnetohydrodynamic (MHD) system, creates electricity by heating up a conductive fluid and passing it through a permanent magnetic field.

Electrochemical Arsenic Remediation in Rural Bangladesh D-11

University of California-Berkeley students will develop a technology to help Bangladesh reduce the amount of arsenic in drinking water. It is estimated that 60 million Bangladeshis drink water that is contaminated by arsenic at levels well above the standards set by the World Health Organization.

Sustainable Biological Phosphorus Removal: A New Theory To Meet Increasingly Stringent Effluent Discharge Requirements A-17

University of California-Davis students are developing a more efficient method of removing phosphorus from wastewater by more accurately incorporating the interactions of microbes in a real wastewater environment.

Production of Natural Plastics in Wastewater Treatment A-18

University of California-Davis students will work to design and construct an efficient means of producing plastic from wastewater. The process will incorporate bacteria used in wastewater treatment and will be far less polluting than traditional plastics produced by using petrochemicals.

Zero Waste Biodiesel: Using Glycerin and Biomass To Create Renewable Energy C-6 (2)

University of California-Riverside students will create a combustible alternative form of energy derived from glycerin. Glycerin is a by-product of biodiesel creation from vegetable oil and, with the surging popularity of biodiesel, has flooded the market with excess glycerin. The group will create a useful product that combines glycerin with sawdust or used paper, is combustible, and is carbon neutral.

A Sustainable Approach To Preserve the Choctawhatchee Coastal Dune Lakes of Florida D-8

University of Florida students will study the coastal dune lakes of the Choctawhatchee Basin in Florida to suggest alternative land-use practices. They will develop a baseline of the lakes' condition for measuring future human impacts and to provide information for land use decisions.

CHALLENGE AREAS					
Agriculture	Information Technology				
Built Environment	Materials and Chemistry				
(a) Energy	Water				

Treatment and Reuse of Urban Storm Water With a Customized Constructed Wetland B-26

University of Hawaii at Manoa students will design and build a storm water wetland using native Hawaiian plants. The wetland will be the first phase in the creation of a more complex construction that will be able to handle multiple wastewater sources.

Architecture as Pedagogy: Interdisciplinary Design and Creation of a Carbon-Neutral Idaho Environmental Learning Center at the University of Idaho McCall Field Campus

D-19

University of Idaho students will plan, design, and construct a carbon-neutral environmental learning center. The McCall Outdoor Science School will take into account the use of space, waste treatment, stormwater management, site design, energy efficiency, and sustainable building materials.

Sustainable Water Development Program for Rural Nigeria B-10

University of Illinois at Urbana-Champaign students will create a sustainable water development program for rural Nigeria. They seek to help the village of Adu Achi develop a water management program and a distribution system that uses water from the Ajali aquifer, a safer and more dependable source than the current contaminated surface water source.

Design and Testing of a Point-of-Use Electrolytic Chlorine Generator for Drinking Water Disinfection in Poor Countries B-21

University of Iowa students will develop a hand-held bleach generator potentially useful for disinfecting drinking water in households of poor communities around the world. The device converts saltwater to bleach with the input of electricity from a battery or hand crank.

Social Feasibility of Energy-Efficient Retrofits and Educational Campaigns for Sustainable Energy Use in Preexisting College Residence Halls A-12 (2)

University of Maryland–Baltimore County students will study the most effective means of promoting energy conservation within student residences. They will identify which energy-saving techniques are most palatable to student residents and which energy campaigns they respond to by performing a study of three different dormitories.

P³ Teams for 2008 alphabetically by college/university

Project Title
Exhibit Location Challenge Area
Description

Creating a Sustainable Project Dashboard B-19 (2)

University of Massachusetts-Lowell students will develop an interactive software program designed to evaluate the performance of sustainability projects. The software will collect data, perform analyses, and visualize measurements of the social, economic, and environmental performance of sustainability initiatives.

Enhanced Nutrient Removal From Onsite Wastewater Treatment Systems D-6

University of Missouri–Columbia students will develop a wastewater treatment system that removes excess nutrients from septic tanks. These excess nutrients, primarily phosphorus and nitrogen, leach into local bodies of water and cause nutrient pollution. This in turn causes growth of algae, which uses up the water's oxygen. The system will allow the septic tank to produce nutrient-rich sludge as a fertilizer for land application.

Development and Evaluation of Three Simple, Low-Cost, Low-Tech Tests for Microbial Fecal Indicators in Drinking and Recreational Water C-2

University of North Carolina at Chapel Hill students will develop and test three simple, inexpensive, and portable means of testing water for microbial and viral infection. An enormous portion of the world does not have access to safe drinking water and has no way of knowing whether or not the water they use is safe. This group will develop point-of-use tests for consumers to know whether water is safe for drinking, cooking, feeding infants, and personal hygiene.

Sustainable Plastics: Designing and Demonstrating Renewable, Biodegradable Products Made of Soy Protein-Based Plastics B-15

University of Wisconsin–Madison students will design and produce plastic from soy protein. This plastic is made from renewable materials and is biodegradable, offering a sustainable alternative to fossil fuel-based plastics. It can be produced on conventional plastic processing equipment, but the technology must be improved to make it economically feasible for commercial production.

CHALLENGE AREAS				
Agriculture Built Environment	Information Technology Materials and Chemistry			
Energy	Water			

Comparison of Engines Operated on Canola-Based Biodiesel to Engines Operated on Petroleum Diesel

B-16 🎁

Virginia State University and **James Madison University** students will demonstrate to small-scale farmers that biodiesel can be a sustainable fuel to use in their equipment. To accomplish this, they will compare the engines of electric generators run on diesel with those run on biodiesel as a means of demonstrating to small-scale farmers that biodiesel can be profitable and efficient.

Water Treatment and Education in Villahermosa, Mexico D-1

William Marsh Rice University students will design and construct a water treatment facility for a middle school in Villahermosa, Mexico. Currently, the water supply for the 2,700-student school is contaminated by waste runoff that causes illnesses. This project will create a sand filtration system as well as a UV sterilization system powered by a solar array to give the students access to clean water.

Wind Power From Kites: Low-Cost, Sustainable Energy for Developing Nations D-26 (2)

Worcester Polytechnic Institute students are designing a low-cost system that generates electricity from the up and down motion of a tethered kite. This low-cost and highly efficient kite system can help bring electricity to the 2 billion people worldwide who live without electricity.

Nanostructured Material Design for Mercury, Arsenic, and Selenium Capture D-25

Worcester Polytechnic Institute students are using nanotechnology to create a material that captures mercury, arsenic, and selenium produced during coal combustion. These trace elements are a major source of pollution associated with coal power.

Phase II Teams - 2006/2007 P3 Award Winners

Project Title Exhibit Location Description

The Affordable Bioshelters Project: Testing Technologies for Affordable Bioshelters C-24

Appalachian State University students will design and build affordable greenhouses that are powered renewably to conserve energy and, therefore, reduce the demand for fossil fuels, and allow more food to be grown locally at lower economic and ecological cost.

An Innovative System for Bioremediation of Agricultural Chemicals for Environmental Sustainability

B-11

University of Illinois at Urbana-Champaign students are working to find an efficient way to reduce chemical leaching from agricultural fields, using a design that requires no maintenance, can be easily installed, and makes use of naturally available materials.

The Learning Barge: Environmental + Cultural Ecologies on the Elizabeth River A-11

University of Virginia students, in collaboration with community partners, are designing and fabricating an off-the-grid, floating field station.

Development of Sustainable Water Systems in Yoro, Honduras D-18

Lafayette College students will design a sustainable water supply and sanitation system for the rural village of La Fortuna using a systematic evaluation method developed at the College. The solution is based on sustainability lessons learned from a previous project and uses simple technologies and active community input.

EPA's P³ Award

The P³ Award competition enables college students to research, develop, and design scientific and technical solutions to sustainability challenges. More than 350 students and their faculty advisors will compete for the 4th Annual P³ Award and the opportunity for an additional \$75,000 grant to move their designs to the marketplace or to implement them in the field.

A panel convened by the American Association for the Advancement of Science will judge the competition on April 20 - 21. EPA will choose and announce the P³ Award winners on April 22.



Founded in 1848, AAAS serves some 262 affiliated societies and academies of science, serving 10 million individuals. The nonprofit AAAS is open to all and fulfills its mission to "advance science and serve society" through initiatives in science policy; international programs; science education; and more.

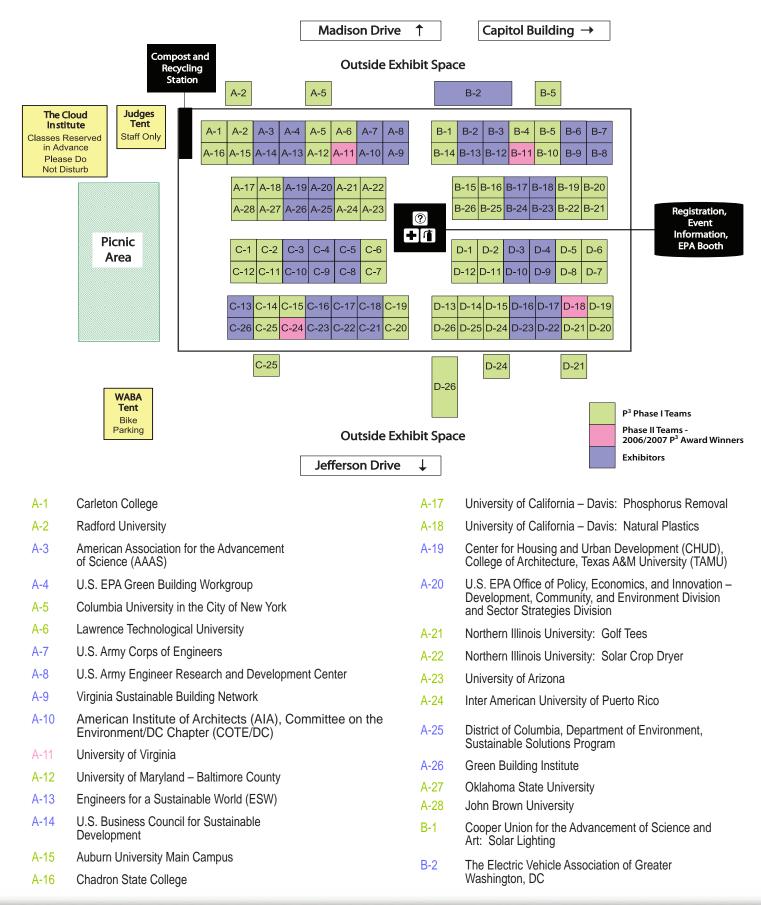
Other Awards

Green Building Initiative Award

This year, the **Green Building Initiative™ (GBI)**, a not-for-profit organization dedicated to "bringing green to the mainstream" by promoting credible and practical approaches to green building, will recognize one participating team with a \$1,000 award to further its work. The award will be presented for the "Most Innovative Sustainable Commercial Design Project." The GBI will evaluate teams that submit projects focused on commercial design and address any of the seven areas of assessment from its innovative commercial construction rating and assessment tool, Green Globes™. These seven areas of assessment are project management; site; energy; water; resources; emissions, effluents, and other impacts; and indoor environment.

The Youth Council on Sustainable Science and Technology (YCOSST), a joint project of the American Institute of Chemical Engineers-Institute for Sustainability (AIChE-IfS) and SustainUS, will donate \$1,000 to the team awarded the 2008 YCOSST P³ Award. The criteria for the award include considerations regarding development, deployment to regions with limited resources, materials, and youth involvement. Specifically, the judges will consider involvement of interdisciplinary collaboration; use of novel, innovative technologies to facilitate distance communication during research; employment of sustainable practices during research; ability of youth or people without significant financial ability or property rights to obtain and use the device or invention; use of materials that are locally produced and available to the general population; ability of local populations to maintain the device or invention; integral involvement of youth in implementation; and direct benefit to youth.

2008 National Sustainable Design Expo Floor Plan



B-3	American Society of Landscape Architects (ASLA)	C-14	Gonzaga University
B-4	The Ohio State University Research Foundation	C-15	Rutgers University – New Brunswick
B-5	Elizabethtown College	C-16	USDA CSREES National Water Program
B-6	U.S. EPA Office of Pollution Prevention and Toxics	C-17	Department of Transportation (DOT) Center for Climate Change and Environmental Forecasting
B-7	U.S. EPA Green Chemistry Program & U.S. EPA Green Engineering	C-18	U.S. EPA Collaborative Science and Technology Network for Sustainability (CNS)
B-8	The International Ecotourism Society (TIES)	C-19	Pierce College
B-9	American Chemical Society Green Chemistry Institute (ACS GCI)	C-20	Princeton University
B-10	University of Illinois at Urbana-Champaign	C-21	Peace Corps
B-11	University of Illinois at Urbana-Champaign	C-22	American Council On Renewable Energy (ACORE)
B-12	U.S. EPA Office of Air and Radiation, Climate	C-23	Energy Conversation
	Change Division	C-24	Appalachian State University
B-13	National Park Service (NPS)	C-25	Appalachian State University
B-14	Cooper Union for the Advancement of Science and Art: Fluoride Filter	C-26	LEAFHouse at the University of Maryland
B-15	University of Wisconsin – Madison	D-1	William Marsh Rice University
B-16	Virginia State University	D-2	Loyola University of Chicago
B-17	NC Solar Center at NC State University	D-3	Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy
B-18 B-19	National Council for Science and the Environment (NCSE) University of Massachusetts – Lowell	D-4	The Youth Council on Sustainable Science and Technology (YCOSST) & SustainUS
B-20	Iowa State University	D-5	James Madison University
B-21	University of Iowa	D-6	University of Missouri – Columbia
B-22	Ohio University – Main Campus	D-7	Oregon State University
B-23	Office of Sustainability – Yale University	D-8	University of Florida
B-24	Portland State University Sustainability Programs	D-9	U.S. EPA Office of Water, Stormwater Program
B-25	Humboldt State University	D-10	National Buildin g Museum
B-26	University of Hawaii at Manoa	D-11	University of California – Berkeley
C-1	Heidelberg College	D-12	Carnegie Mellon University
C-2	University of North Carolina at Chapel Hill	D-13	Illinois Institute of Technology: Cast Paper Dome
C-3	American Society of Civil Engineers (ASCE) –	D-14	Illinois Institute of Technology: Sustainable Water
	National Capital Section and Committee on Sustainability	D-15	Illinois Institute of Technology: Fuel Cells
C-4	Engineers Without Borders	D-16	NASA Goddard Space Flight Center Green Initiatives
C-5	Prince George's County Department of Environmental Resources	D-17	The University of Tennessee's Institute for a Secure and Sustainable Environment
C-6	University of California – Riverside	D-18	Lafayette College
C-7	Drexel University	D-19	University of Idaho
C-8	The Cloud Institute for Sustainability Education	D-20	St. Lawrence University
C-9	U.S. EPA Environmental Education Division	D-21	Clemson University
C-10	Centers for Disease Control and Prevention/National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (CDC NCEH/ATSDR)	D-22	Green Building Initiative
		D-23	U.S. EPA Office of Pesticide Programs
C-11	Marquette University	D-24	Keene State College
C-12	Pennsylvania State University – Main Campus	D-25	Worcester Polytechnic Institute: Nanostructured Material Design
C-13	No-Till On The Plains, Inc.	D-26	Worcester Polytechnic Institute: Wind Power From Kites

Exhibitors for 2008

Organization Exhibit Location Description

Center for Housing and Urban Development (CHUD), College of Architecture, Texas A&M University (TAMU)

A-19

CHUD's vision is to enable a new paradigm of integration among practice, outreach, and service, through education and research, which within a continuum of research, development, demonstration, deployment, evaluation, and dissemination of solutions, will enhance the quality of life for people and the quality of the built environment for particularly disadvantaged communities.

archone.tamu.edu/chud/

Centers for Disease Control and Prevention/National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (CDC NCEH/ATSDR) C-10

CDC's NCEH and the ATSDR scientifically consider all factors that affect the health of people, including healthy community design.

www.cdc.gov/nceh and www.atsdr.cdc.gov

The Cloud Institute for Sustainability Education C-8

The Cloud Institute for Sustainability Education is dedicated to the vital role of education in creating awareness, fostering commitment, and guiding actions toward a healthy, secure, and sustainable future for ourselves and for future generations. We monitor the evolving thinking and skills of the most important champions of sustainability and transform them into educational materials and a pedagogical system that inspires young people to think about the world, their relationship to it, and their ability to influence it in an entirely new way.

www.sustainabilityed.org

U.S. Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy D-3

The U.S. DOE Office of Energy Efficiency and Renewable Energy's mission is to strengthen America's energy security, environmental quality, and economic vitality in public-private partnerships that enhance energy efficiency and productivity; bring clean, reliable and affordable energy technologies to the marketplace; and make a difference in the everyday lives of Americans by enhancing their energy choices and their quality of life.

http://www.eere.energy.gov/

Department of Transportation (DOT) Center for Climate Change and Environmental Forecasting

C-17

The Center is the focal point in DOT of technical expertise on transportation and climate change. Through strategic research, policy analysis, partnerships and outreach, the Center creates comprehensive and multimodal approaches to reduce transportation-related greenhouse gases and to mitigate the effects of global climate change on the transportation network.

www.climate.dot.gov



Now I truly believe that we in this generation must come to terms with nature, and I think we're challenged, as mankind has never been challenged before, to prove our maturity and our mastery, not of nature but of ourselves.

- Rachel Carson

American Association for the Advancement of Science (AAAS) A-3

AAAS is an international organization dedicated to advancing science around the world. In addition to publishing the journal *Science* and other science-related publications, AAAS undertakes numerous programs that promote science to the public and monitors issues that affect the scientific community, including career development initiatives and activities focused on science and innovation for sustainable development.

www.aaas.org and http://sustainabilityscience.org

American Chemical Society Green Chemistry Institute (ACS GCI) B-9

The mission of the ACS GCI is to advance the implementation of green chemistry principles into all aspects of the chemical enterprise. To accomplish this mission, ACS GCI supports research, works to integrate green chemistry into all levels of education, aids companies with industrial applications, hosts conferences, and cooperates with an international network of green chemistry advocates.

www.acs.org/greenchemistry

American Council On Renewable Energy (ACORE) C-22

ACORE works to bring all forms of renewable energy into the mainstream of America's economy and lifestyle. ACORE is a 501(c)(3) nonprofit organization based in Washington, DC, with paying members from every aspect and sector of the renewable energy industries and their trade associations, including wind, solar, geothermal, biomass and biofuels, hydropower tidal/current energy and waste energy.

www.acore.org

American Institute of Architects (AIA), Committee on the Environment/DC Chapter (COTE/DC)

A-10

The AIA promotes the awareness and participation of allied building professionals and the general public about the practices of sustainable design and green building. This is achieved through monthly lectures as well as educational and social events.

http://www.aiadc.com/COTEdcmis.asp

American Society of Civil Engineers (ASCE) – National Capital Section and Committee on Sustainability

C-3

ASCE is a leader in sustainability through its ongoing programs: Practice, Education and Research for Sustainable Infrastructure (PERSI) and Engineers Forum on Sustainability (co-sponsored with ASEE, AICHE, IEEE, & ASME International).

www.asce.org/professional/sustainability

American Society of Landscape Architects (ASLA) B-3

Founded in 1899, ASLA is the national professional association for landscape architects, representing more than 18,200 members in 48 professional chapters and 68 student chapters. Landscape architecture is a comprehensive discipline of land analysis, planning, design, management, preservation, and rehabilitation. The Society's mission is to lead, educate, and participate in the careful stewardship, wise planning, and artful design of our cultural and natural environments.

www.asla.org

Exhibitors for 2008 (continued)

Organization Exhibit Location Description

District of Columbia, Department of Environment, Sustainable Solutions Program A-25

The District's Energy Office in the Department of the Environment is the resource for energy in the District of Columbia. The Energy Office provides education on energy efficiency and renewable programs for residents, businesses, schools and institutions, and District government; energy assistance to low-income residents; and weatherization assistance to qualifying residents. Additionally, the Energy Office is taking the lead in bringing sustainability and renewable energy alternatives to the District of Columbia. **ddoe.dc.gov**

Electric Vehicle Association of Greater Washington, DC (EVADC) B-2

The EVADC, a chapter of the international Electric Auto Association, has been educating the American public on Electric Vehicle (EV)/Plug-in Hybrid EV (PHEV) technology for a greener, cleaner, and more sustainable America, since 1982. EVs and PHEVs as key technologies will be on display.

www.EVADC.org

Energy Conversation C-23

The mission of the Energy Conversation is to create a collaborative, networked community of Energy Smart advocates to inform, educate, and communicate with the American people on how to successfully build a sustainable energy future. Energy Conversation is 3,300 people strong and sponsored by 22 federal departments and agencies. Our table will offer materials about our efforts and the many ways for engagement. **www.energyconversation.org**

Engineers for a Sustainable World (ESW) A-13

The ESW is a national, nonprofit network committed to building a world where all people enjoy the basic resources to pursue healthy, productive lives, in harmony with each other, and with our earth. Established in 2002, ESW's rapidly growing member network now includes thousands of individuals who are committed to building a more sustainable world. ESW Collegiate Chapters across the United States mobilize their student and faculty members through new educational initiatives, sustainability-oriented design projects, and volunteer activities to foster practical and innovative solutions to address the world's most critical challenges. http://www.eswusa.org

Engineers Without Borders-USA (EWB-USA) C-4

The EWB–USA is a nonprofit humanitarian organization established to partner with developing communities worldwide to improve their quality of life. This partnership involves the implementation of sustainable engineering projects, while involving and training internationally responsible engineers and engineering students. www.ewb-usa.org/, www.ewb-dc.org/, and http://engineering.cua.edu/activities/EWB/

The Green Building Initiative D-22

The Green Building Initiative strives to accelerate the adoption of building practices that result in energy efficient, healthier, and environmentally sustainable buildings by promoting credible and practical green building approaches for residential and commercial construction.

www.thegbi.org

- Margaret Mead

The Green Building Institute (GBI) A-26

Serving the Northern Virginia, DC, and Maryland regions, the GBI, a 501(c)(3) nonprofit organization, educates the public and building and design professionals about sustainable building practices and technologies. The GBI offers classes and workshops on rainwater collection, energy efficiency, green roofs, solar energy, home energy audits, passive solar energy, and more. With nearly 3,000 individuals and organizations as participants, the GBI network provides significant outreach and networking opportunities for homeowners and professionals throughout the building industry.

www.greenbuildinginstitute.org

The International Ecotourism Society (TIES) B-8

Founded in 1990, TIES is the world's largest and oldest ecotourism organization dedicated to promoting responsible travel to natural areas that conserve the environment and improve the well-being of local people. As a nonprofit, non-governmental and multi-stakeholder association, TIES is unique in its efforts to provide guidelines and standards, training, technical assistance, research, and publications to foster sound ecotourism development. With the goal of uniting conservation, communities, and sustainable travel, TIES serves its members in more than 90 countries.

www.ecotourism.org

LEAFHouse at the University of Maryland C-26

LEAFHouse embraces the Chesapeake Bay watershed context for a smart, adaptable, resource-efficient home powered by renewable energy. The adaptable resource-efficient house demonstrates what happens when bio-inspired design savvy, traditional know-how, and cutting-edge technology join as integral parts of a sustainable lifestyle.

www.solarteam.org

NASA Goddard Space Flight Center (GSFC) Green Initiatives D-16

Creating a Sustainable Site Plan

- Develop meadows, forests, and bio-retention zones
- Education & outreach program: inspire, engage, educate
- Science program: study how we influence the GSFC environment
- Become proactive stewards of our resources
- Reduce contaminant runoff
- Reduce GSFC's dependence on nonrenewable resources

Develop a Green Energy Management Program

- Implement energy and water conservation measures
- Implement process improvements and increase employee awareness
- Use alternative fuels and renewable energy
- Participate in demand-side management
- Partner with other agencies

Exhibitors for 2008 (continued)

Organization
Exhibit Location
Description

National Building Museum D-10

Created by an act of Congress in 1980, the National Building Museum is America's premier cultural institution dedicated to exploring and celebrating architecture, design, engineering, construction, and urban planning. Since opening its doors in 1985, the Museum has become a vital forum for exchanging ideas and information about issues such as managing suburban growth, preserving landmarks and communities, and revitalizing urban centers. **www.nbm.org**

National Council for Science and the Environment (NCSE) B-18

The NCSE improves the scientific basis of environmental decision-making through collaborative programs with diverse communities, institutions, and individuals. NCSE operates programs in five strategic areas: Providing Science Solutions; Strengthening Education; Organizing the National Conference on Science, Policy, and the Environment; Communicating Science-Based Information; and Advancing Science Policy on the National Level. We work for a society where environmental decisions are based on an accurate understanding of the underlying science, its meaning and limitations, and the potential consequences of action or inaction.

www.ncseonline.org

National Park Service (NPS) Climate Friendly Parks Program B-13

Through a partnership with EPA, the NPS works to reduce the effects of climate change and air pollution in our national parks by educating park employees, identifying strategies to reduce harmful emissions, and empowering park employees to communicate with the public about the program.

www.nps.gov/climatefriendlyparks

NC Solar Center at North Carolina State University (NCSU) B-17

The NC Solar Center is a program of the College of Engineering at NCSU that works closely with state government and the renewable energy industry. It manages and maintains the NCSU Solar House and its adjacent research facilities, and serves as a clearinghouse for innovative green energy technologies through research and demonstration, technical assistance, and education, outreach, and training.

www.ncsc.ncsu.edu

No-Till on the Plains, Inc. C-13

No-Till on the Plains, Inc. is a nonprofit educational organization providing information to farmers on adopting no-till and other sustainable production methods, and to further develop those techniques. Although adopting no-till and good agronomy (good biology) has the potential to greatly improve farmers' efficiency and profitability, many other benefits accrue to society, such as greatly reduced soil erosion of cropland, less sedimentation of rivers and lakes, better wildlife habitat in fields, and the sequestering of atmospheric carbon dioxide in soil organic matter.

www.notill.org

Office of Sustainability - Yale University B-23

Yale University is committed to developing best practices that balance economic viability with ecosystem health and human health in its operational practices, the built environment, and institutional decision making while contributing leading scholarship, research, and educational models to a global dialogue.

www.yale.edu/sustainability

Thomas Edison

Portland State University (PSU) Sustainability Programs B-24

From the Center for Sustainable Processes & Practices and the Community Watershed Stewardship Program to the graduate program in Leadership in Ecology, Culture & Learning, PSU provides vast opportunities for students to engage in community-based sustainability research and education. PSU's engaged approach to education has helped make Portland, Oregon, the nation's laboratory for community livability.

www.pdx.edu/sustainability

Prince George's County Department of Environmental Resources C-5

With one of the highest levels of trash in the Anacostia Watershed, Takoma Branch is a major source of pollution. Our exhibit will demonstrate how the installation of a trash netting system and green street project improves water quality in the tributary and ultimately the Anacostia River. The Talbert Lane trash netting system operates unattended and utilizes the energy of the stormwater flow to drive trash and debris into disposable nets, while the green street project located in the Knollbrook Drive median employs landscaping and low impact development practices to clean, filter, and improve stormwater runoff from the roadway and other impervious surfaces.

www.princegeorgescountymd.gov

The University of Tennessee's Institute for a Secure and Sustainable Environment **D-17**

The University of Tennessee's Institute for a Secure and Sustainable Environment promotes development of policies, technologies, and educational programs that cut across multiple disciplines, engage the university's research faculty and staff, and grow in response to pressing environmental and security issues facing the state, the nation, and the globe.

isse.utk.edu

USDA CSREES National Water Program C-16

The mission of the National Water Program is to create and disseminate knowledge that ensures a safe and reliable source of water of the appropriate quality to meet the needs of food and fiber production; human health, use, and economic growth; and maintenance and protection of natural environmental systems throughout the United States and its territories. This mission is accomplished through research, education, and extension programs to protect and improve water resources in agricultural, rural, and urbanizing watersheds (including forest lands, rangelands, and croplands).

www.usawaterquality.org

U.S. Army Corps of Engineers

A-7

The U.S. Army Corps of Engineers specializes in military construction, civil works (levees, dams, navigation, etc.), and disaster response, always focused on engineering solutions for a sustainable and secure future. www.usace.army.mil

Exhibitors for 2008 (continued)

Organization Exhibit Location Description

U.S. Army Engineer Research and Development Center (ERDC) A-8

The U.S. Army ERDC is one of the most diverse engineering and scientific research organizations in the world, conducting R&D to support the soldier, military installations, and the Corps of Engineers' civil works mission. The ERDC conducts a \$1 billion research program annually in the areas of Military Engineering; Geospatial Research and Engineering; Environmental Quality/Installations; and Civil Works/Water Resources through the capabilities of seven laboratories located around the nation.

www.erdc.usace.army.mil

U.S. Business Council for Sustainable Development (US BCSD) A-14

The US BCSD is a nonprofit association of businesses whose purpose is to deliver highly focused, collaborative projects that help its members and partners demonstrate leadership in the United States on sustainable development and realize business value. Our collaborative projects link people and companies together in ways that produce new business opportunities, create new channels for working with governments, and help address key competitiveness issues facing the U.S. manufacturing and service industries. The Council has been a leader in the sustainable development field for more than 15 years by delivering value to its members through projects, education, and best practice sharing.

www.usbcsd.org

U.S. EPA Collaborative Science and Technology Network for Sustainability (CNS) C-18

The CNS grants program is a "testing ground" for new scientific or engineering approaches to sustainability. CNS enables people from multiple sectors—state and local governments, nonprofits, and universities—to work together on practical projects designed to achieve regional scale sustainability (environmental, social, and economic). Projects address resources such as air, water, land, energy, materials, and ecosystems. http://es.epa.gov/ncer/cns

U.S. EPA Environmental Education Division C-9

Through environmental education, people gain an understanding of how individual actions affect the environment, acquire skills to weigh various sides of issues, and become better equipped to make informed decisions. The goals of EPA's Environmental Education Division are to increase public awareness and knowledge of environmental issues; teach individuals critical thinking; enhance individuals' problem-solving and decision-making skills; and not advocate a particular viewpoint.

http://www.epa.gov/enviroed/

U.S. EPA Green Building Workgroup A-4

Buildings impact the environment and human health in a number of significant ways. Efforts to reduce these impacts as buildings are built, renovated, and used are frequently called "green," and there is growing activity and interest in green solutions that address more than one environmental issue. EPA's Green Building Workgroup is working to help coordinate across EPA's programs as efforts to green the built environment continue.

www.epa.gov/greenbuilding

- Nelson A. Rockefeller

U.S. EPA Green Chemistry Program and U.S. EPA Green Engineering Program B-7

The U.S. EPA Green Chemistry Program and Green Engineering Program are voluntary, partnership programs that promote innovative chemistry and engineering technologies that reduce or eliminate the use or generation of hazardous substances in the design, manufacture, and use of chemical products and processes.

www.epa.gov/greenchemistry and www.epa.gov/oppt/greenengineering/

U.S. EPA Office of Air and Radiation, Climate Change Division B-12

Education and outreach to the public is provided on climate change science, impacts and solutions, including such methods as classroom teachers' kits, fact sheets, Web sites, and partnership programs like Climate Friendly Parks. Climate Friendly Parks is a partnership between EPA and the National Park Service that helps national parks take action on addressing climate change impacts to our nation's natural resources and the public to share in the stewardship of the parks.

www.epa.gov/climatechange and www.nps.gov/climatefriendlyparks

U.S. EPA Office of Pesticide Programs D-23

The national pesticide program strategic goal is to protect public health and the environment by ensuring that pesticides and alternatives are safe and available for a healthy America. This includes wide-ranging efforts in risk reduction through pesticide registration and review, outreach and education of workers and the public, and improvements in scientific methods data. The Pesticide Program includes evaluation of both ecological and human health risk.

www.epa.gov/pesticides

U.S. EPA Office of Policy, Economics, and Innovation – Development, Community, and Environment Division (DCED) and Sector Strategies Division A-20

The DCED helps communities grow in ways that expand economic opportunity, protect public health and the environment, and create and enhance the places that people love. Through research, tools, partnerships, case studies, grants, and technical assistance, EPA and DCED are helping America's communities turn their visions of the future into reality. The Sector Strategies Division achieves performance improvement and burden reduction in 12 important sectors by addressing their unique issues and challenges in a collaborative setting. Both DCED and Sector Strategies are part of EPA's Office of Policy, Economics, and Innovation.

www.epa.gov/smartgrowth and www.epa.gov/sectors

U.S. EPA Office of Pollution Prevention and Toxics (OPPT) B-6

EPA's OPPT manages programs under the Toxic Substances Control Act (TSCA) and the Pollution Prevention Act (PPA) of 1990. Under these laws, EPA evaluates new and existing chemicals and their risks, and finds ways to prevent or reduce pollution. OPPT also manages a variety of environmental stewardship programs that encourage companies to reduce and prevent pollution.

www.epa.gov/oppt

Organization **Exhibit Location** Description



U.S. EPA Office of Water, Stormwater Program

Required by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) is the national wastewater permitting program. Any discharge of a pollutant from a point source to a water of the United States requires an NPDES permit. The NPDES Stormwater Program writes stormwater discharge permits for construction site operators, industrial facilities and municipal separate storm sewer systems (MS4s), and provides training and outreach to help these dischargers reduce stormwater runoff pollution.

www.epa.gov/npdes/stormwater

U.S. Partnership for Education for Sustainable Development Materials available at A-3

The U.S. Partnership is open to individuals, organizations and institutions in the United States dedicated to education for sustainable development. It works with all sectors of American society, including the business, higher education, K-12, communities and faith sectors, to foster sustainability in the United States.

www.uspartnership.org

U.S. Peace Corps C-21

Since 1961, more than 190,000 volunteers have served in the Peace Corps, working in such diverse fields as education, health, HIV/AIDS education and prevention, information technology, business development, the environment, and agriculture. Peace Corps volunteers must be U.S. citizens and at least 18 years of age. Peace Corps service is a 27-month commitment.

www.peacecorps.gov

Virginia Sustainable Building Network (VSBN) A-9

VSBN promotes environmentally sound building practices for Virginia. Founded in 1995, VSBN has developed a statewide network of representatives from housing, banking, utility, construction, government, and environmental interests to change the way homes, commercial buildings, and communities are built in Virginia. www.vsbn.org

Washington Area Bicyclist Association Tent Near Picnic Area

The mission of the Washington Area Bicyclist Association is to create a healthy, more livable region by promoting bicycling for fun, fitness, and affordable transportation; advocating for better bicycling conditions and transportation choices for a healthier environment, and educating children, adults, and motorists about safe bicycling.

www.waba.org

The Youth Council on Sustainable Science and Technology (YCOSST) and SustainUS **D-4**

The Institute for Sustainability (IfS), an American Institute of Chemical Engineers (AIChE) Technological Community, has partnered with SustainUS to form YCOSST. YCCOST's mission is to create an understanding about sustainability issues and principles, raise awareness of the science and technology behind sustainable choices, and develop grassroot campus efforts for students in diverse disciplines. SustainUS is a nonprofit, nonpartisan organization of young people advancing sustainable development and youth empowerment in the United States through proactive education and advocacy at the policy-making and grassroots levels.

www.aiche.org/IFS/Youth and www.sustainus.org

There are 42 partnering organizations from government, industry and non-governmental organizations participating in the implementation of the competition:

Government

- National Aeronautics and Space Administration (NASA)
- National Science Foundation
- Office of the Federal Environmental Executive
- USAID
- United States Department of Agriculture
- White House Council on Environmental Quality
- White House Office of Science and Technology Policy

Industry

- DaimlerChrysler
- Dell
- Herman Miller
- Hewlett-Packard
- Nexant
- U.S. Business Council for Sustainable Development

Non-Governmental Organizations (NGOs)

- ACS Green Chemistry Institute
- American Chemical Society
- American Institute of Chemical Engineers
- American National Standards Institute
- American Society for Engineering Education
- American Society of Civil Engineers
- American Society of Mechanical Engineers
- Association of American Geographers
- Association of Environmental Engineering and Science Professors
- Association of University Leaders for a Sustainable Future
- ASTM International Campus
- Decade of Education for Sustainable Development
- Education for Sustainability Western Network
- Engineers Forum for Sustainability
- Engineers Without Borders
- Engineers for a Sustainable World
- Global Environment and Technology Foundation
- Industrial Design Society of America
- Institute for Electrical and Electronics Engineers
- Institute for Society, Ecology, and Environment
- International Center for Appropriate and Sustainable Technology (ICAST)
- Massachusetts Toxics Use Reduction Institute
- National Center for Manufacturing Sciences
- National Collegiate Inventors and Innovators Alliance (NCIIA)
- National Council for Science and the Environment
- U.S. Green Buildings Council
- U.S. Partnership for the UN Decade for Education for Sustainable Development
- WERC
- World Resources Institute

Greening the Expo

In keeping with the goals of EPA's P³ program, the National Sustainable Design Expo strives to follow environmentally sustainable practices.

Here's what we are doing today:

- Use nondisposable rental equipment
- Generate electricity from a renewable resource (biodiesel fuel)
- Turn off equipment when not in use
- Support green companies through environmentally preferable purchasing
- Locate the event in an area accessible by public transportation
- Provide bike parking
- Minimize use of commercial plastic water bottles
- · Recycle paper, aluminum, and plastic
- Provide composting of organic waste
- Promote the event and communicate with stakeholders electronically whenever possible
- Provide resource protection for the National Mall
- Use 100% post-consumer recycled paper for event literature
- Print event literature double sided
- Design reusable banners and signage
- Use recycled glass for P³ Awards
- Use frames made of recycled wood for P³ Award certificates
- Distribute lanyards made from recycled materials
- Recycle plastic name tag holders

Ways you can join us next year:

Exhibitor

By demonstrating or exhibiting your environmentally sustainable technology, product, or business model during this 3-day event, you will have a rare opportunity to interact with other environmentally conscious exhibitors from universities, government agencies, non-governmental organizations, and interested public.

Co-Sponsor

Co-sponsors for the Expo can use this vehicle to promote sustainable education and advance their connections to sustainable technologies, solve environmental problems, and/or support academic research and science.

Partners

P³ partners promote the P³ competition to their stakeholders, are involved with EPA's peer review process to determine which P³ projects should be funded, and are eligible to set up and staff a booth to promote their organization's sustainability activities during the National Sustainable Design Expo on the National Mall.

P³ Team and P³ Faculty Advisor

Each P³ interdisciplinary student team must have a university or college faculty member as an advisor. Advisors and teams are expected to attend the National Sustainable Design Expo and the P³ Award ceremony in Washington, DC, in the spring. If you want to make sure you are notified about upcoming requests for applications, sign up at http://cfpub.epa.gov/ncer_list/elists/. Requests for applications open in August and close in December.

See **www.epa.gov/P3** for more information about any of these opportunities.